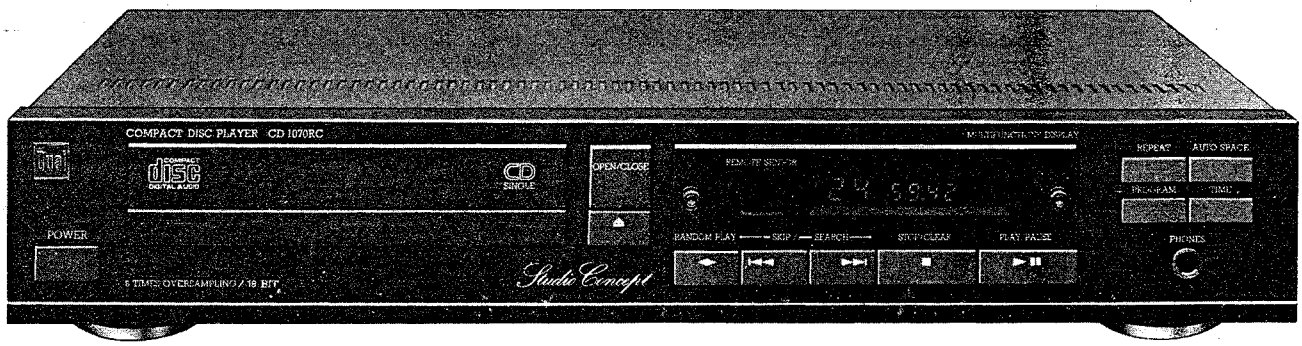
Dual

Service-Anleitung
Service Manual
Instructions de Service

CD 1065
CD 1070 RC



Technische Daten Meßwerte = typische Werte	**Technical data** Measured values = typical values	**Caractéristiques techniques** Valeurs mesurées = valeurs typiques	**Dati tecnici** Valori di misuri = valori tipici	
Frequenzbereich	**Frequency response**	**Courbe de réponse**	**Banda do Frequenza**	20–20 000 Hz ± 0,5 dB
Geräuschspannungsabstand	**Signal to noise ratio**	**Rapport signal/bruit**	**Rapporto segnale disturbo**	103 dB
Dynamikbereich	**Dynamic range**	**Dynamique**	**Dinamica**	96 dB
Übersprechdämpfung (1 kHz)	**Crosstalk (1 kHz)**	**Diaphonie (1 kHz)**	**Diafonia**	98 dB
Klirrfaktor (1 kHz)	**Harmonic distortion (1 kHz)**	**Distorsion harmonique (1 kHz)**	**Distorsione atmonica**	< 0,01 %
Gleichlaufschwankungen	**Wow and flutter**	**Tolérance de vites**	**Toleranza di velocità**	< ± 0,001 %
Ausgangsspannung	**Output voltage**	**Tension de sortie**	**Tensione di uscita**	2 V
Max. programmierbare Musiktitel	**Max. music title programming**	**Titres de musique au max. programmé**	**Programmazione di pezzi musicale**	16
D/A Wandler	**D/A Converter**	**D/A Convertisseur**	**Quantizzazione**	18 Bit double
Abtastfrequenz	**Sampling frequency**	**Fréquence de pick-up**	**Frequenza di campionatura**	352,8 kHz
Abtastsystem	**Pick up**	**Pick up**	**Testina di lettura**	3-Strahl-Laser 3-beam optical pick up
Leistungsaufnahme	**Power consumption**	**Consommation**	**Potenza assorbita**	12 W
Netzspannung Model Europa Model USA/Kanada	**Mains voltage** European model US/Canadian model	**Voltage secteur** Modèle Europe Modèle USA/Canada	**Tensione di rete** modello Europa modello Stati Uniti/Canada	 230 V/50 Hz 120 V/60 Hz

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921 629 0991

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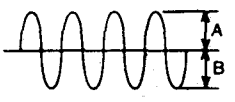
Abgleichanleitung CD 1065/CD 1070

Um in den Testmode zu kommen gehen Sie wie folgt vor.

1. Power aus.
2. Testpunkte P 03 und P 04 kurzschließen.
3. Power ein und Kurzschluß trennen.
4. Im Display erscheint 0 ≙ Testmode 0
5. Durch drücken der Playtaste läßt sich Testmode 1 und 2 einstellen.
6. Testmode verlassen: Power aus.

Signalquelle	Einstellung Gerät	Meßgeräteanschluß	Abgleichposition	Abgleichbemerkungen
	PLL			
	Testmode 0	1. P 08 mit Masse kurzschließen 2. Frequenzzähler an PLCK	VR 101	4,321 MHz ± 10 kHz
	Kurzschluß trennen			
Testplatte *Phillips* 5 A	EF Balance			
	Testmode 1 CD vorsichtig mit dem Finger drehen	Oszilloskop an P 06 (TE)	VR 103	 DC 0V A = B
	Focus Balance			
	Testmode 2	Oszilloskop an P 07	VR 102	sauberes EFM-Signal ca. 1,3 VSS
	Focus Gain			
	Testmode 2	1. NF-Voltmeter an P 09 2. mit Tongenerator 1,2 kHz 300 mV über 10 kΩ an P 05	VR 104	55 mV AC
	Tracking Gain			
	Testmode 2	1. NF-Voltmeter an P 10 2. mit Tongenerator 1,2 kHz 300 mV über 10 kΩ an P 06	VR 105	52 mV AC
	Grundstellung der Regler vor dem Abgleich (nur wenn Gerät nicht läuft) VR 101 Mitte VR 102 Mitte VR 103 Mitte VR 104 Linksanschlag VR 105 Rechtsanschlag			

Der integrierte CD-Spieler arbeitet mit unsichtbarem Laserlicht.

Nicht in den Strahl blicken und nicht dem Strahl aussetzen!

Vorsicht, Laserstrahlung im Inneren des Gerätes!

Zur Vermeidung von Strahlungsschäden darf das Gehäuse nur von qualifiziertem Fachpersonal geöffnet werden.

Informationsetikett auf der Geräterückseite (siehe Bild).

The integrated CD-Player works with invisible laser-light.

Do not look into this beam and don't abandon yourself to radiation.

Attention, Laser-radiation also inside of the unit!

To avoid damages of radiation unit should be opened only by qualified service personnel.

Information label on the rear of unit (see picture).

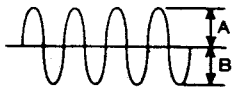
VORSICHT!
UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET IST!
NICHT DEM STRAHL AUSSETZEN!
LASER KLASSE 1

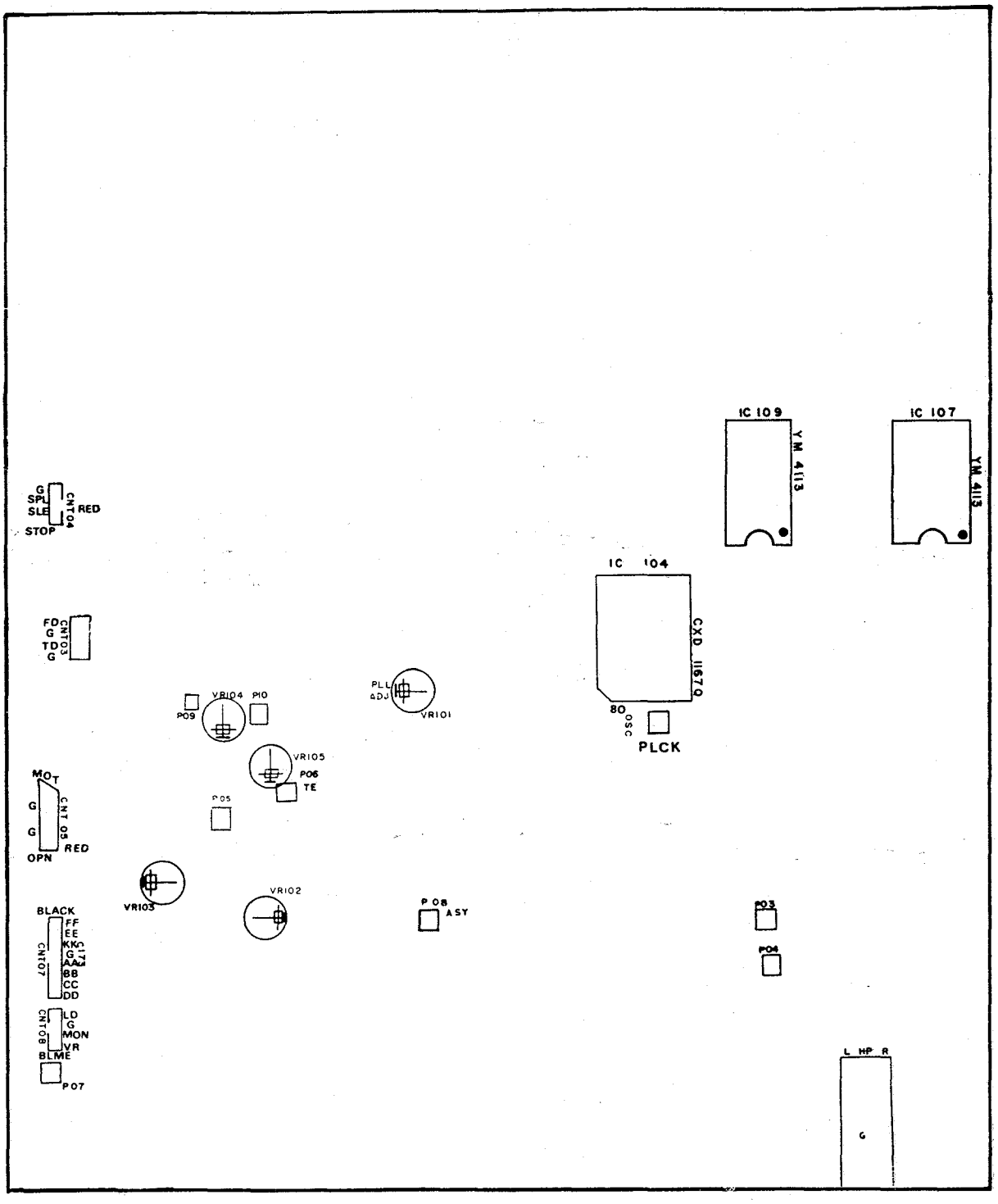
CAUTION —
INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
CLASS 1 LASER PRODUCT.

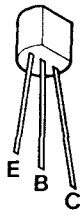
Tuning instructions for CD 1065/CD 1070

Proceed as follows to enter the test mode:

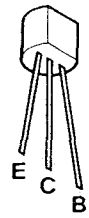
1. Power OFF.
2. Short-circuit test points P03 and P04.
3. Power ON and remove short circuit.
4. 0 = test mode appears in the display.
5. Press the play key to set test mode 1 or 2.
6. To exit test mode: power OFF.

Signal source	Equipment setting	Connection of measuring instrument	Item to be tuned	Tuning remarks
	PLL			
	Test mode 0	1. Short-circuit P 08 to earth 2. Frequency counter to PLCK	VR 101	4.321 MHz ± 10 kHz
	Remove short circuit			
Phillips test disc 5 A	EF balance			
	Test mode 1 Carefully turn CD with your finger	Oscilloscope to P 06 (TE)	VR 103	 DC 0V A = B
	Focus balance			
	Test mode 2	Oscilloscope to P 07	VR 102	Clear EFM signal ca. 1.3 VSS
	Focus gain			
	Test mode 2	1. AF voltmeter to P 09 2. with tone generator 1.2 kHz 300 mV via 10 kOhms to P 05	VR 104	55 mV AC
	Tracking gain			
	Test mode 2	1. AF voltmeter to P 10 2. with tone generator 1.2 kHz 300 mV via 10 kOhms to P 06	VR 105	52 mV AC
	Basic setting of controller prior to tuning (only when device is not operating) VR 101 centre VR 102 centre VR 103 centre VR 104 left stop VR 105 right stop			

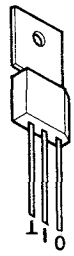




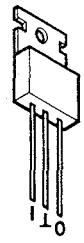
MPS A 05
MPS A 55



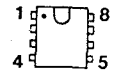
KTA 966 A
KTA 1015 Y
KTC 1815 Y
2 SD 1302 T



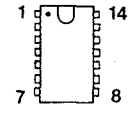
MC 7905 CT



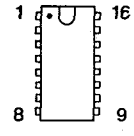
GD 7805



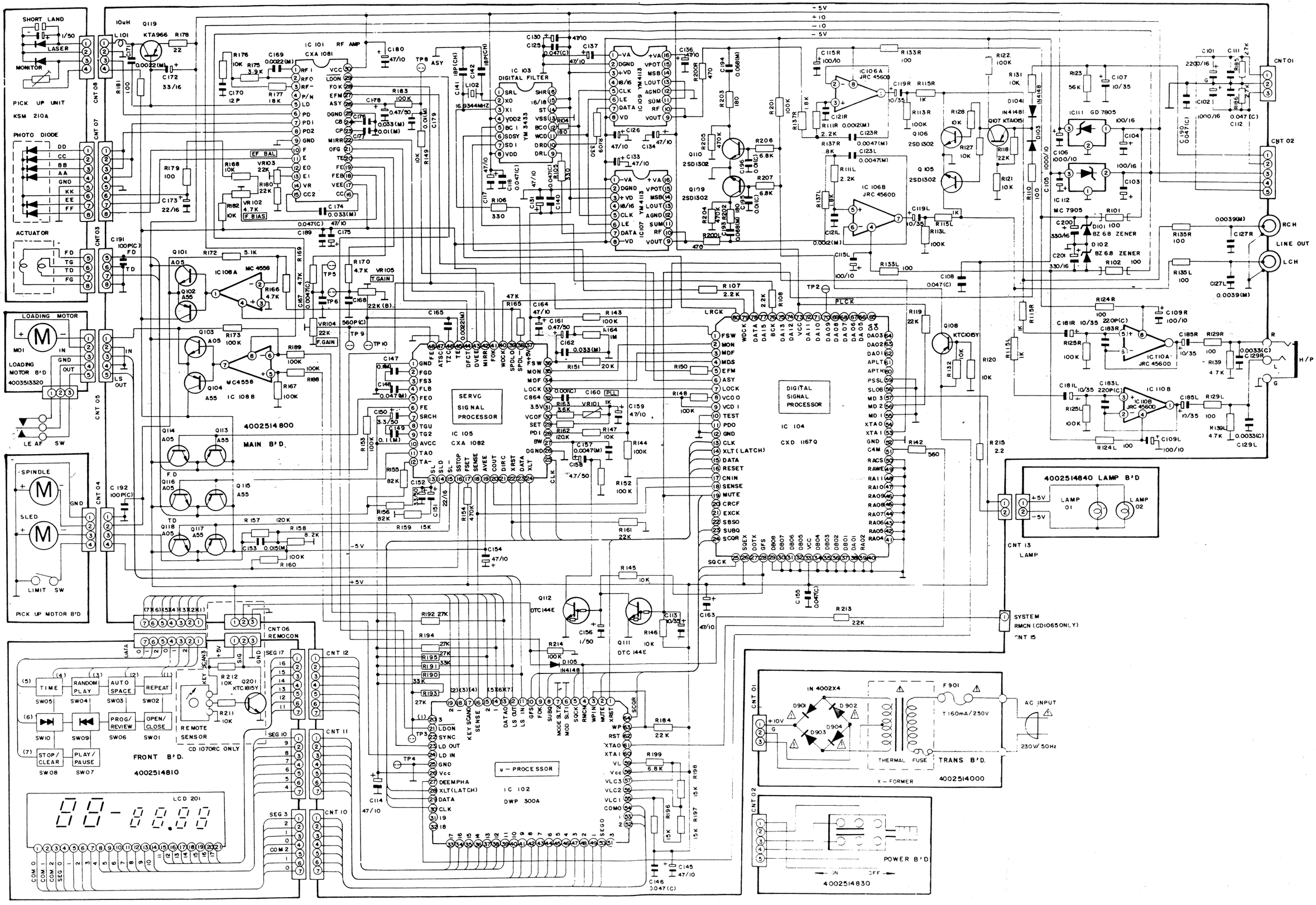
RC 4558 D



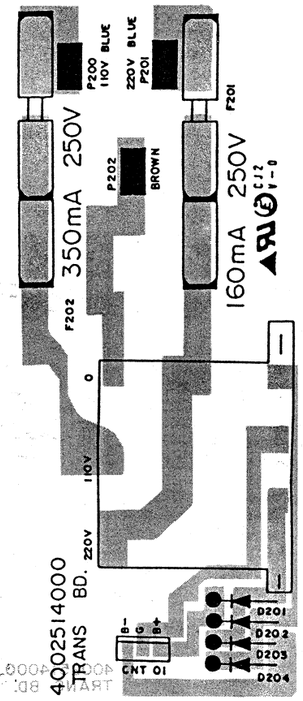
AD 1856 N
GD 74 LS 20

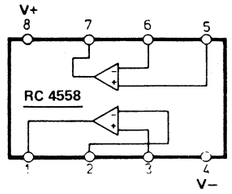


YM 4113 B 3
YM 3433

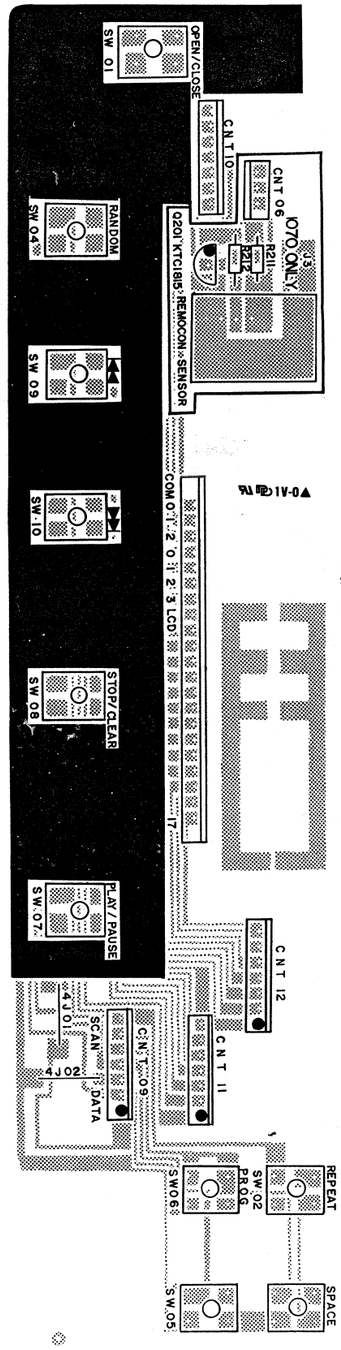

PICK UP UNIT
KSM 210A
PHOTO DIODE
ACTUATOR
LOADING MOTOR
LOADING MOTOR B'D
4003513320
SPINDLE
SLED
LIMIT SW
PICK UP MOTOR B'D
MAIN B'D.
4002514800
IC 101 RF AMP
CXA 1081
DIGITAL FILTER
YM 3433
YM 4113
SERVO SIGNAL PROCESSOR
IC 105
CXA 1082
DIGITAL SIGNAL PROCESSOR
IC 104
CXD 1167Q
μ - PROCESSOR
IC 102
DWP 300A
IC 108 A
MC 4558
IC 108 B
IC 106 A
IC 106 B
IC 107 B
IC 110 A
IC 110 B
JRC 4560D
IC 111 GD 7805
MC 7905
IC 112
FRONT B'D.
4002514810
REMOTE SENSOR
CD 1070RC ONLY
LCD 201
4002514840 LAMP B'D
POWER B'D.
4002514830
TRANS B'D.
4002514000
X - FORMER
IN 4002X4
THERMAL FUSE
AC INPUT
230V/50Hz
SYSTEM
RMCN (CD1065ONLY)
+5V
+10
-10
-5V
F.BIAS
EF BAL
T.GAIN
F.GAIN
RCH
LCH
LINE OUT
H/P

Motorplatte
Motor PCB

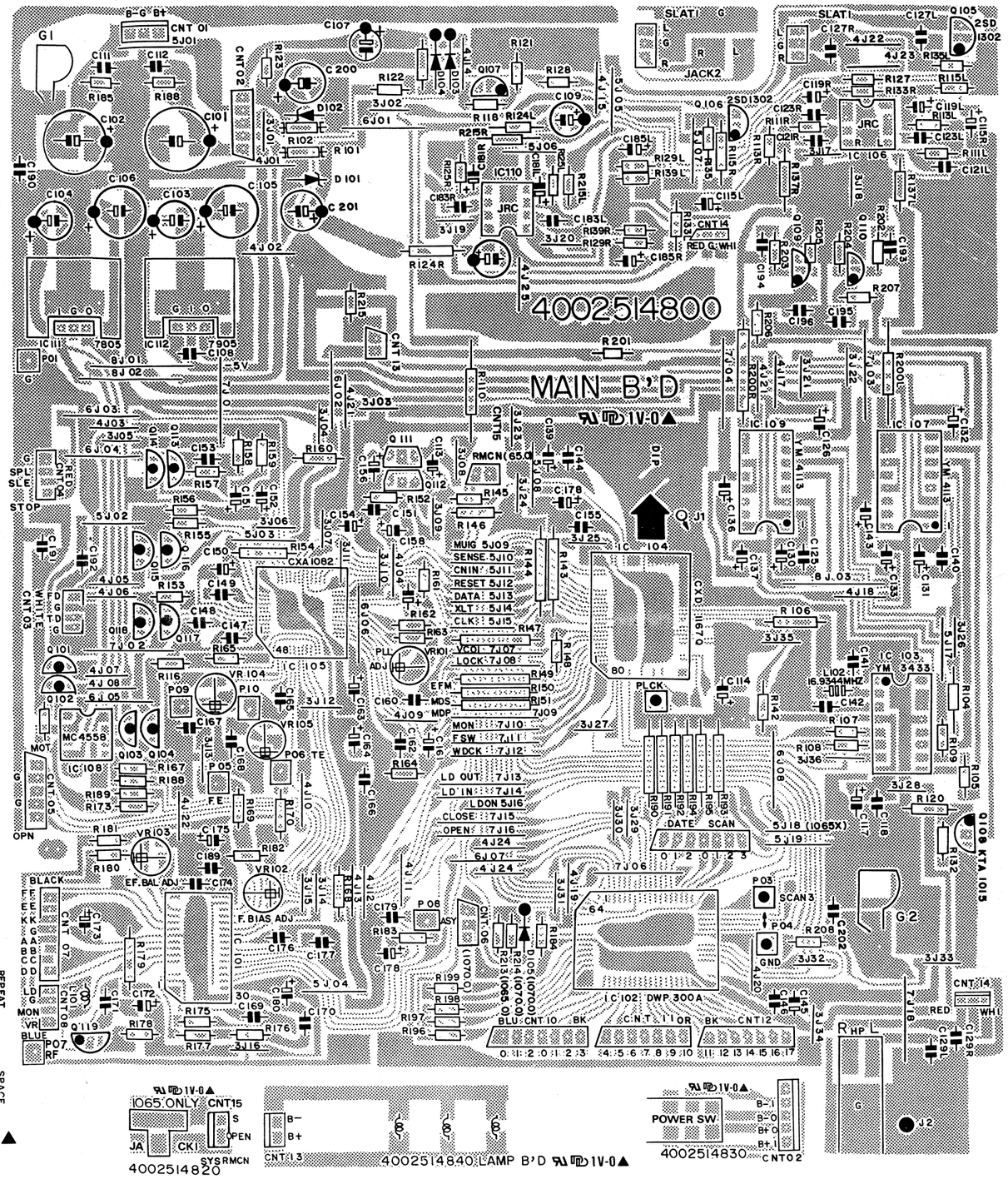




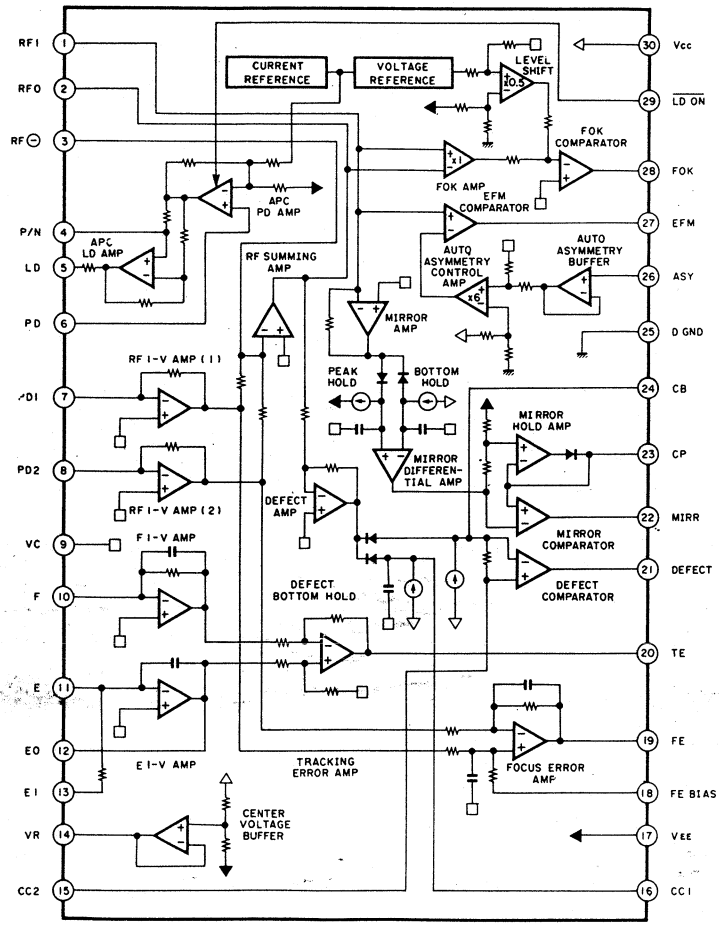
Frontplatte
Front PCB



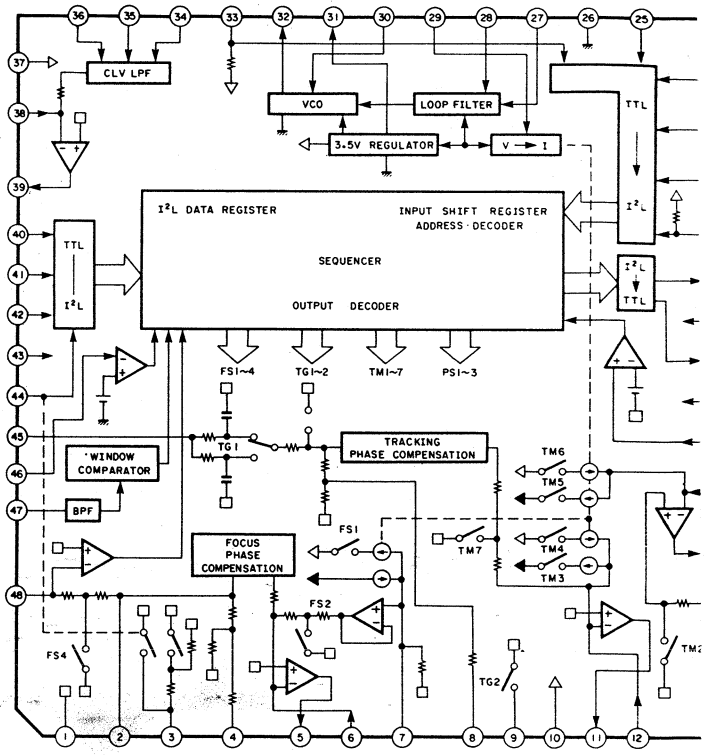
Grundplatte
Main PCB

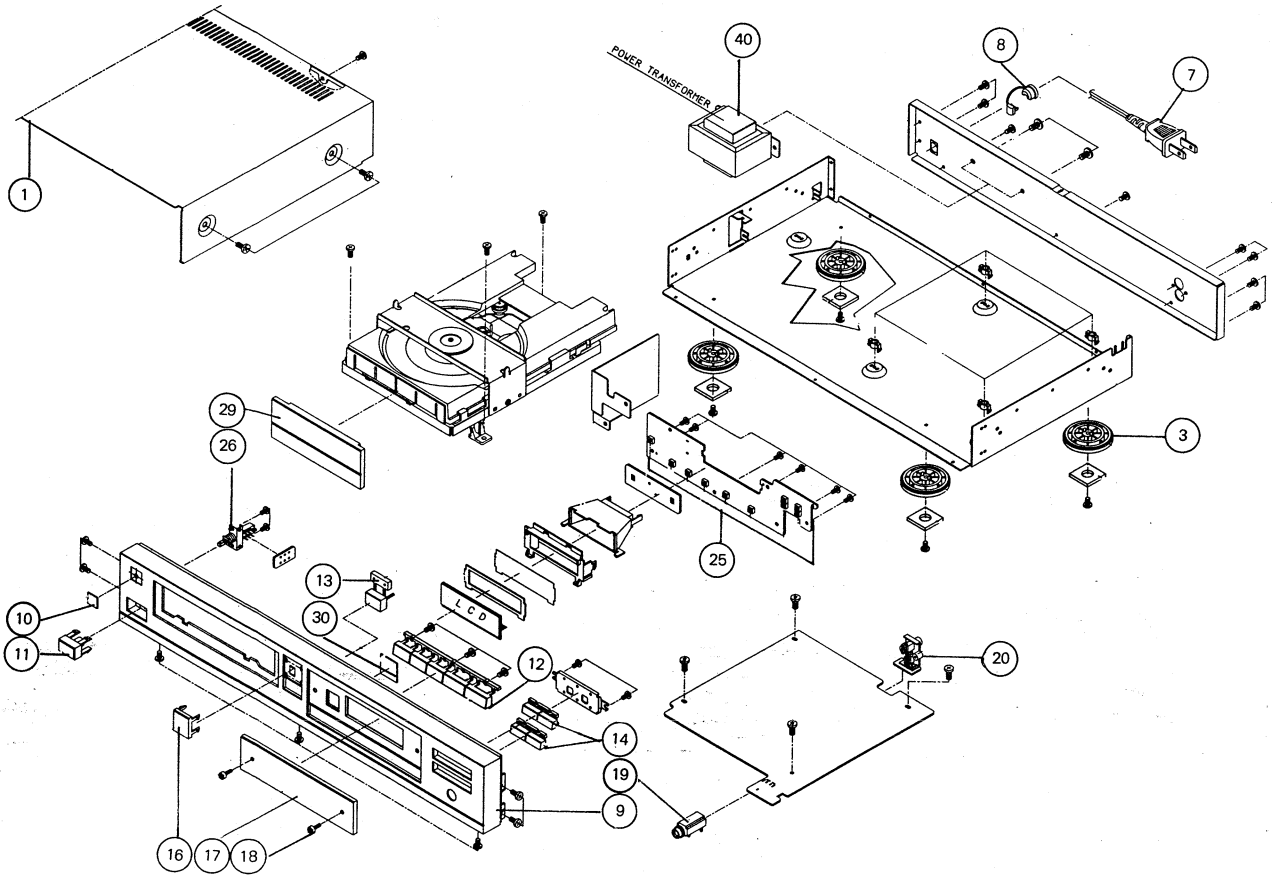


CXA1081M

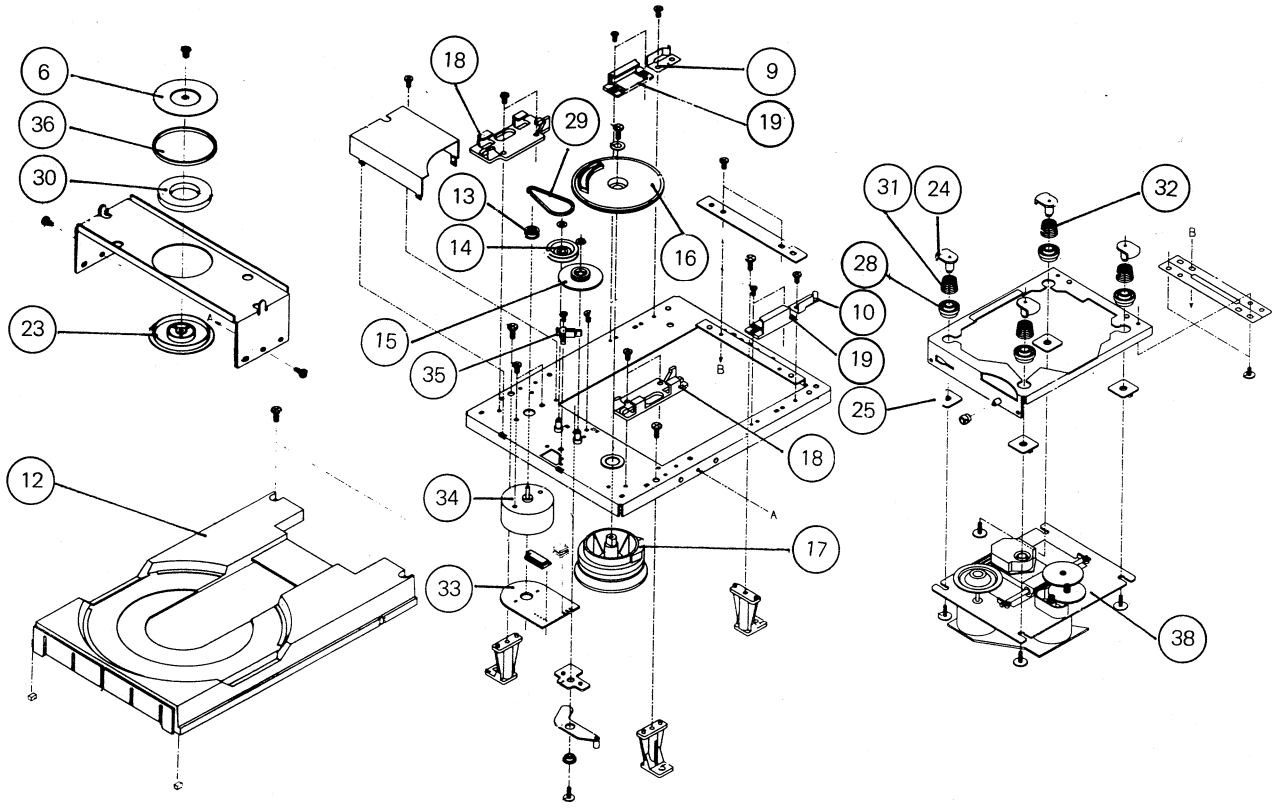


CXA1082AQ





Mechanik



Ersatzteile · Replacement parts · Pièces détachées · CD 1065/70

Pos.	Art.-Nr.	Bezeichnung
1	284310	Gehäuseblech
3	283710	Gerätefuß
7	232996	Netzkabel Eu.
8	237548	Kabeldurchführung
9	286920	Frontblende CD 1065
9	286921	Frontblende CD 1070 RC
10	283750	Dual-Zeichen
11	283665	Netztaste
12	284312	Funktionstasten 5-fach
13	284313	Taste
14	284314	Taste 2-fach
16	284849	Abdeckung
17	284687	Fenster CD 1065
17	284684	Fenster Display CD 1070
18	284773	Schraube
19	283705	Kopfhörerbuchse
20	282347	Cinchbuchse 1-fach
25	280197	Schalter
26	284318	Schalter
27	286897	Remotebuchse
29	284683	Abdeckung
30	283720	Fenster CD 1070
40	283712	Netztrafo
	284822	Fernbedienung RC 105
	284972	Bedienungsanleitung CD 1065
	284973	Bedienungsanleitung CD 1070 RC
		Mechanik
6	284801	Magnethalter
9	284802	Führung L
10	284803	Führung R
12	284804	Schublade
13	284805	Antriebsrolle
14	284806	Antriebsrad
15	284807	Zahnrad
16	284808	Laderad
17	284809	Kurvenrad
18	284810	Halter V
19	284811	Halter H
24	284813	Dämpferachse
23	284812	Zentrierstück
25	284814	Halter
28	284815	Gummipuffer
29	284315	Riemen
30	284816	Magnet
31	284817	Feder V
32	284818	Feder M
33	284819	Motorplatte
34	283709	Motor (Load)

Pos.	Art.-Nr.	Bezeichnung
35	283736	Schalter
36	284820	Haltefedern
38	283708	Mechanik
		Grundplatte
L 101	284800	Spule 10 UH
L 102	283109	Quartz 16,9344 MHz
D 101	283714	Diode DZ 6,8
D 102	283714	Diode DZ 6,8
D 103 bis D 106	223906	Diode 1 N 4148
IC 101	283143	IC CXA 1081 M
IC 102	284799	IC UP DWP 300 A CPU
IC 103	286922	IC YM 3433
IC 104	286923	ICD CXD 1167 Q
IC 105	283096	IC CXA 1082 AQ
IC 106	236299	IC RC 4558 D
IC 107	286924	IC YM 4113 B 3
IC 108	236299	IC RC 4558 D
IC 109	286924	IC YM 4113 B 3
IC 110	236299	IC RC 4558 D
IC 111	283727	IC GD 7805
IC 112	283142	IC MC 7905 CT
Q 101	282059	Transistor MPS A 05
Q 102	282060	Transistor MPS A 55
Q 103	282059	Transistor MPS A 05
Q 104	282060	Transistor MPS A 55
Q 105	274774	Transistor 2 SD 1302 T
Q 106	274774	Transistor 2 SD 1302 T
Q 107	282077	Transistor KTA 1015 Y
Q 108	282077	Transistor KTA 1015 Y
Q 109	274774	Transistor 2 SD 1302 T
Q 110	274774	Transistor 2 SD 1302 T
Q 111	283729	Transistor DTC 144 E
Q 112	283729	Transistor DTC 144 E
Q 113	282060	Transistor MPS A 55
Q 114	282059	Transistor MPS A 05
Q 115	282060	Transistor MPS A 55
Q 116	282059	Transistor MPS A 05
Q 117	282060	Transistor MPS A 55
Q 118	282059	Transistor MPS A 05
Q 119	283436	Transistor KTA 966 A
		Tastenplatte
Q 201	282076	Transistor KTC 1815 Y
LCD 01	286925	Display
RMC 01	283730	IC JMM-001 (IR-Sensor)
LA 1	283721	Lampe 9,6 V 120 MA
LA 2	283721	Lampe 9,6 V 120 MA

Änderungen vorbehalten! Subject to change! Sous réserve de modification!